

Dairy Farmer Dies 15 Days After All-Terrain Vehicle Rolled Over Him

SUMMARY

A 66-year old male farmer (the victim) died two weeks after his four-wheel all-terrain vehicle (ATV) (Figure 1) overturned on a road/trail beside an embankment on his private land, and rolled over him. The victim was driving in his pasture checking his fence and looking for an opening where his cattle got through the previous evening. The victim reported that he drove around some brush on the trail and then drove over a small tree, expecting it would crush under the wheels, but instead



Figure 1. The ATV involved in the incident.

it caused his ATV to begin to roll over. The victim was pitched down a 20 foot embankment and the ATV followed and rolled over him. Two hours later when the victim's son returned to the farm and realized his father wasn't home from checking the fence and the cattle, he went to look for him. The victim was unable to move, but yelled to his son to tell him where he was. The emergency medical service (EMS) was notified by the victim's son and EMS summoned a medical helicopter. The victim was transported by helicopter to a nearby medical facility where he died of complications on September 1, 2003. The WI FACE investigator concluded that to prevent similar occurrences, farmers and other employers who use ATV's should:

- **conduct a thorough evaluation of the terrain to identify hazards in the pathway prior to beginning an operation with an off-road vehicle, remain conscious of the surroundings at all times, and know the safe capabilities of the ATV.**
- **select an off-road utility vehicle equipped with Rollover Protective Structures (ROPS) and a seatbelt designed to be used for work, rather than an all-terrain vehicle.**
- **wear a helmet, following the basic ATV Safety Code.**

INTRODUCTION

On September 1, 2003, a 66-year-old male farmer died from complications two weeks after the four-wheel ATV he was operating pitching him down a 20-foot embankment, that was located beside the trail in his pasture. The Wisconsin FACE field investigator learned about the incident from the death certificate. The investigator reviewed the death certificate, the coroner and sheriff's reports and spoke with the Department of Natural Resources conservation warden. On March 17, 2005, the field investigator met with the victim's family.

The victim and his family had been farming the past 30 years. The victim spent his youth on a farm and, as the only child, learned to operate machinery through on-the-job experience with his father. He began raising cattle at age 10. At age 22, he spent two years on a submarine in the Navy. Upon returning home, he raised a few acres of tobacco and was employed at a farm supply company before he began renting land from his father. He purchased the farm from his father approximately 18 years ago. The victim, his son, and his father plowed and planted the fields together.

At the time of the incident, the family had 30 Holstein milk cows and the victim and his son utilized approximately 140 acres for crops. They raised primarily corn, but also raised oats, soybeans and hay. The family also owned a 130-acre pasture where the incident occurred. The farm business had no employees outside of the family members. A usual workday began at 5:30 a.m. when the victim and his wife would feed the cattle and do the chores. They would have breakfast about 7:00 a.m. and then the victim would go into the field to plow, plant, or hay, depending on the season. This particular summer the victim spent more time in the field working with his son. They would regularly eat at 12:00 Noon and again at 5:30 p.m., followed by milking and doing the chores again. They had a capacity to milk 36 cows.

The 1997 medium-size four-wheel Honda ATV was the second ATV the family had owned. The family had owned either Hondas or other utility vehicles for "a very long time." The victim drove the ATV nearly every day to check on the cattle because the cattle wouldn't run from the Honda, and they would run if someone came into the pasture on foot. The pasture was heavily wooded and at one time had been logged, leaving brush, branches and stumps on one of the trails the loggers had used. The victim loved the woods and would often use that trail when he checked on his cattle. He was also described as very safety conscious and he frequently volunteered to assist at their local community Farm Progress Days.

The Wisconsin All-Terrain Vehicle laws describe an ATV as the following: an engine-driven device which has a net weight of 900 pounds or less; a width of 48 inches or less; is equipped with a seat designed to be straddled by the operator and is designed to travel on 3 or more low-pressure tires. A low pressure-tire has a minimum width of 6 inches and the tire should be inflated with an operating pressure not to exceed 6 pounds per

square inch, as recommended by the manufacturer. ATV's in Wisconsin must be registered. Three options for registering an ATV exist, including Public Use Registration; Agricultural Use Registration; and Private Use Registration. The victim utilized the "Private Use" Registration. This allowed the owner to use his ATV exclusively on private property. Like most ATV's, this model was not equipped with Rollover Protective Structures (ROPS) or seatbelts. Family members reported they did not drive the ATV at high speeds. The victim reported that he was barely moving at the time of the incident.

INVESTIGATION

On the night before the incident, the wind had blown a tree onto the fence in the pasture and a neighbor found the victim's cattle on the road. They were chased back into the pasture. The next morning was a very nice day; the sun was shining, it was clear with good visibility and the terrain was dry. The victim told his wife he was going to check on the cattle and repair the fence. He also told his son what his plans were before he left for the pasture on the Honda ATV about 7:00 a.m. His son left to do some work at his business and was gone for about two hours.

Around 9:00 a.m., the victim finished checking on the cattle in the pasture and had fixed the fence. He was driving his ATV down a hill back in the woods in his pasture, using the track that the loggers used a few years ago. He told his family he was just "crawling" in the ATV on the trail because this trail had branches and tree stumps on it. He stated that he had driven around some brush and then tried to drive over a small tree that was growing out of a stump. He thought it would smash down under the tires of the Honda, but it didn't and the ATV slowly tipped, causing him to fall down a 20-foot embankment ahead of the ATV. The ATV followed him down the embankment and came down on top of him and bounced off, causing multiple injuries. The victim had a cut on his head. He was not wearing a helmet. He thought he hit a rock or boulder that broke his ribs. He reported that he was "out" for awhile. He determined he couldn't jump when the ATV began to tip because he knew the embankment was there. He thought he would land on his feet before he got to the embankment, but instead he was thrown off as the ATV tipped. Many of the victim's injuries were on the left side of his body and the left handle bar on the ATV was bent.

When the victim's son returned home, he went to check on his father and then went to his own house and asked his wife if she had seen his father. She hadn't, so the son went out to the pasture to find him. While he was looking for him, the victim heard his son but was unable to move. He called out to him so his son would find him. The embankment was not in a visible location. The victim was about 1½ miles from home. The son located his father and contacted the Emergency Medical Service (EMS). They arrived at the site within approximately 10 minutes. The fire department cleared a place for the helicopter to land and the victim was flown to a nearby medical center.

The victim had multiple injuries and was in intensive care for 5-6 days. The week he was going to be discharged, he unexpectedly died when getting out of bed.

CAUSE OF DEATH

The death certificate listed the cause of death as cardio respiratory failure due to a pulmonary embolism following blunt trauma as a result of an ATV crash.

RECOMMENDATIONS/DISCUSSION

Recommendation #1: Farmers should conduct a thorough evaluation of the terrain to identify hazards in the pathway prior to beginning an operation with an off-road vehicle, remain conscious of the surroundings at all times and know the safe capabilities of the ATV.

Discussion: In this incident the victim was aware of the terrain, but misjudged the impact that the small tree would have on his ATV. The trail was rough and had branches, brush and stumps on it.

Recommendation #2: Farmers and other employers should select an off-road utility vehicle equipped with ROPS and a seatbelt and designed to be used for work, rather than an all-terrain vehicle.

Discussion: In this incident, the victim was operating a four-wheel ATV. Farmers and employers should consider using an off-road utility vehicle. Some utility vehicles come equipped with a ROPS and seat belt and these may be better choices for agricultural use. Off-road utility vehicles are larger, wider and longer than an ATV, so they are less likely to tip over and if they would tip over, the ROPS and seatbelt may prevent a serious injury.

Recommendation #3: Farmers and other employers who use off-road utility vehicles should wear a helmet following the basic ATV Safety Code.

Discussion: In Wisconsin the All-Terrain Vehicle law for those registered under the agricultural use or Private use types, helmets are not required for individuals age 16 and older. However, helmets are strongly encouraged.

The Department of Natural Resources “Wisconsin All-Terrain Vehicle Laws” includes the following “Basic ATV Safety Code:

- 1. Do not consume alcohol or take drugs prior to or during your ATV trip. Doing so increases your chances of being injured or killed.**
- 2. Use a full size helmet, goggles or visor to prevent injuries from twigs, stones, ice chips and flying debris.**
- 3. Slow down and don't cut to the inside of the trail corners, it's dangerous and illegal.**
- 4. If you operate an ATV at night, don't override your lights.**
- 5. Only one person should be riding on the ATV.**
- 6. Know the terrain you are going to ride. If it's unfamiliar to you, ask someone who has traveled over it before.**
- 7. Drowning is one of the causes of ATV fatalities. Whenever possible, avoid the ice.**
- 8. Wear sensible, protective clothing designed for ATVing.**

- 9. Do not put your feet down on the ground for balancing around corners; your feet may get caught under the tires and in moving parts of the ATV.**
- 10. Know the weather forecast, especially the ice and snow conditions in the area.**
- 11. Be sure your ATV is in top-notch mechanical condition at the beginning of the season and throughout the months of use.**
- 12. Familiarize yourself with the ATV you are driving by reading in detail the manual accompanying the ATV.**
- 13. Always use the buddy system and ride with a friend on his/her own ATV.**

REFERENCES

Department of Natural Resources. 2004. Wisconsin All-Terrain Vehicle Laws. Madison, WI. PUB-LE-500 2004.

Department of Natural Resources. ATV and Safety information.

<http://www.dnr.state.wi.us/org/es/enforcement/safety/ARVed.html> Date accessed: September 22, 2005.

John Deere. Utility vehicles. 2005.

http://www.deere.com/en_US/ProductCatalog/GC/servlet/Attachment?attNmbr=8002M&prodNmbr=9870M&tM=GC Date accessed: October 12, 2005

Kubota products. Utility vehicles. 2005. <http://www.kubota.com/f/products/rtv900.cfm>
Date accessed: October 12, 2005.

Purschwitz, M. National Farm Medicine Center; Marshfield, WI. Personal Discussion. October 2005.

Stueland D., Zoch T. Off Road Vehicular Injuries in Central Wisconsin: Farm Residents Versus Non-farm Residents. 1995. Journal of Agricultural Safety and Health 1 (3):159-163.

Yearman, W. WI DNR. Eau Clair, WI. Personal Discussion. April 2005.